



PATENT

Our Docket: P-UC 4530

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AUG 15 2002

In re Application of )  
Civelli et al. )  
Serial No: 09/780,576 )  
Filed: February 9, 2001 )  
For: ADP-GLUCOSE RECEPTOR )

Examiner: R. Li

Group Art Unit: 1646

TECH CENTER 1600/2900

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By Melanie K. Webster  
Melanie K Webster, Reg. No. 45.201

Commissioner for Patents  
Washington, D.C. 20231

August 9, 2002  
Date of Signature

RESPONSE TO RESTRICTION REQUIREMENT

In response to the restriction requirement set forth in the Office Action mailed June 10, 2002, Applicants respectfully request consideration of the following remarks.

REMARKS

Claims 1-33 are pending, and are subject to a restriction requirement under 35 U.S.C. § 121. The claims have been restricted into five groups, as follows:

Group I: Claims 1-6 and 12-16, directed to a method of identifying an ADP-glucose receptor agonist or antagonist;

Group II: Claims 7-11 and 17-20, directed to a method of identifying an ADP-glucose receptor ligand;

Inventors: Civelli et al.  
Serial No.: 09/780,576  
Filed: February 9, 2001  
Page 2

Group III: Claim 21, directed to a method of altering signaling through ADP-glucose receptor;

Group IV: Claims 22-24, directed to a method of ameliorating an ADP-glucose receptor associated condition; and

Group V: Claims 25-33, directed to a composition comprising an isolated ADP-glucose receptor polypeptide and ADP-glucose.

Applicants elect, with traverse, the claims of Group I, claims 1-6 and 12-16, for prosecution on the merits. The Examiner is respectfully reminded of the requirements of a proper restriction, as set forth in MPEP § 803:

(A) The inventions must be independent or distinct as claimed; and

(B) There must be a serious burden on the examiner if restriction is not required.  
(emphasis added)

It is respectfully submitted that the restriction is improper because there would not be a serious burden on the Office if restriction were not required.

The invention relates to the determination that ADP-glucose is a specific ligand and agonist of a G-protein coupled receptor designated the ADP-glucose receptor. All pending claims recite a functional relationship between ADP-glucose and the ADP-

Inventors: Civelli et al.  
Serial No.: 09/780,576  
Filed: February 9, 2001  
Page 3

glucose receptor. It is respectfully submitted that it would not be a serious burden on the Examiner to search all of the claims together, because a thorough search of the art relating to ADP-glucose and/or the ADP-glucose receptor would likely reveal art relevant to all five groups of claims. Accordingly, rejoinder of the claims of Groups II-V with elected Group I is respectfully requested.

In the alternative, Applicants respectfully request rejoinder of at least Group II with elected Group I. The claims of Groups I and II share the step of contacting an ADP-glucose receptor polypeptide with one or more candidate compounds under conditions in which ADP-glucose interacts with the ADP-glucose receptor (either by binding or by producing a signal) and identifying a candidate compound that interacts with the receptor (either by binding or by altering a signal).

It is respectfully submitted that searching Groups I and II together would not pose a serious burden on the Office. This is evidenced, for example, by the classification of the claims of Group I and II in the identical search class and identical search subclass. This is also evidenced, for example, by the Office having previously examined claims that recite methods of identifying compounds by receptor binding and by receptor signaling in other applications (see, for example, co-assigned application serial no. 09/327,807 and co-assigned application serial no. 09/379,968, both examined in Group Art Unit 1646; and co-assigned application serial no. 09/560,915, now U.S. Patent No. 6,383,764, examined in Group Art Unit 1647).

Inventors: Civelli et al.  
Serial No.: 09/780,576  
Filed: February 9, 2001  
Page 4

As a further alternative, Applicants respectfully request rejoinder of at least Group V with elected Group I (and further with Group II as set forth above). The Action correctly notes the relationship between Group V and Groups I-IV as product and process of use. However, the Action has not set forth a reasonable basis for the distinction between the claimed composition of Group V and the methods of Groups I and/or II. The composition of the independent claim of Group V comprises both an ADP-glucose receptor and ADP-glucose. Dependent claims specify that the ADP-glucose is detectably labeled; that the receptor polypeptide is contained in a lipid bilayer; or that the composition further comprises a G-protein.

However, the Action refers to a proposed use of one component of the compositions of the claims Group V in support of dividing Group V from Groups I-IV, namely the use of the receptor component to produce antibodies. It is respectfully submitted that the skilled person would not intentionally use a composition containing two or more components, including compositions that contain radiolabeled components, to prepare an antibody against a single component. More reasonably, the compositions of Group V would be used in the receptor screening methods of Groups I and/or II. Accordingly, it is submitted that rejoinder of Group V with elected Group I, and further with Group II, is proper.

Inventors: Civelli et al.  
Serial No.: 09/780,576  
Filed: February 9, 2001  
Page 5

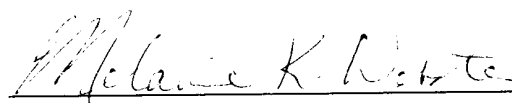
**CONCLUSION**

In summary, Group I is elected, with traverse.  
Reconsideration of the restriction requirement and rejoinder of  
all of the Groups or, in the alternative, Group II and/or Group V  
with elected Group I, is respectively requested.

If there are any questions relating to this  
application, the Examiner is requested to contact Cathryn  
Campbell or the undersigned agent.

Respectfully submitted,

August 9, 2002  
Date

  
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